

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### John Copes Food Products

#### Mid-Pennsylvania Manufacturing Extension Partnership

#### John Cope's Food Products Trims Solid Waste And Increases Profits

##### Client Profile:

John Cope's Food Products, Inc. is a one hundred year-old company that produces and packages frozen and dried vegetables, most notably corn and peas, for regional and national food service and retail sales to consumers. The company is historically known for its dried sweet corn, one of the first products the company produced. Nestled in the heart of Lancaster County's rich agricultural lands, headquartered in Rheems, Pennsylvania, the company employs approximately 150 full-time and part-time/seasonal workers.

##### Situation:

John Cope's Food Products, Inc. (JCFP)'s business had been growing steadily, but profit margins were not meeting expectations. Company executives decided to analyze business opportunities and implement improvement strategies. At the same time, an environmental specialist with PENNTAP (Pennsylvania Technical Assistance Program) contacted MANTEC, a NIST MEP network affiliate and division of the Mid-Pennsylvania Manufacturing Extension Partnership, about the availability of a grant focusing on reducing pollution at a food processing plant. Thanks to a recent visit to the company, MANTEC was able to identify John Cope's Food Products as a good potential match for the grant.

##### Solution:

MANTEC and PENNTAP created a team, including a PENNTAP specialist, a professor of Engineering from the local campus of Penn State University, and a research assistant, to evaluate John Cope's Food Products and determine the economic benefits of more efficient use of raw materials, reduced amounts of wasted finished product, and lower levels of wastewater and solid waste.

The team outlined specific objectives for the study, and proceeded to set-up activity-based costing methods, complete a mass balance analysis of facility inputs and outputs, make observations during a twenty-four hour observation period, analyze waste water samples for specific parameters, and use process flow diagrams to illustrate each step of the processing line, highlighting where waste is generated.

After the team completed each of the objectives, it presented John Cope's Food Products with a report documenting its observations and recommendations. The recommendations listed alternatives and modifications to equipment, production procedures, raw material handling practices, and clean-up procedures that prevent pollution and minimize waste. John Cope's Food Products implemented

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most of the team's recommendations and noticed immediate improvements. Simply reducing solid waste by one percent saved the company \$170,000. The Pollution Prevention (P2) study was funded in part by EPA's Pollution Prevention Incentives for States Grant Program.

### **Results:**

Reduced waste water by approximately 30 percent.  
Increased production by approximately 24 percent.  
Reduced the total amount of potable water used for processing by 7 percent, a reduction of 940,000 gallons of water.  
Reduced solid waste by one percent--approximately 740,000 pounds of material.  
Expecting to receive a minimum of \$170,000 per year in increased profitability.

### **Testimonial:**

"We are obviously pleased with the business results achieved from this study. The savings from this project will have significant impact on the future profitability of our company. We are extremely impressed with the professionalism of the MANTEC team and look forward to future endeavors together."

Larry A. Jones, President and CEO